

CLAIMS

1. Method for producing foamed slag (7) on high-chromium steel melts (6) in an electric arc furnace (1), wherein a mixture of a metal oxide and carbon is introduced into the furnace (1), the metal oxide is reduced by the carbon in the slag (7), and the resulting gases form bubbles in the slag, which thus cause the slag to foam, characterized by the fact that the mixture of metal oxide and carbon is introduced into the furnace as compressed preforms (8) and/or preforms (8) provided with a binder.

2. Method in accordance with Claim 1, characterized by the fact that the density of the preforms (8) is adjusted in such a way that they float in the slag (7).

3. Method in accordance with Claim 1 or Claim 2, characterized by the fact that the density of the preforms (8) is adjusted in such a way that they float in the slag near the phase boundary between the melt (6) and the slag (7).

4. Method in accordance with Claim 2 or Claim 3, characterized by the fact that the density of the preforms (8) is adjusted by the addition of an iron carrier.

5. Method in accordance with any of Claims 1 to 4,  
characterized by the fact that the density of the preforms (8)  
is adjusted in such a way that they disintegrate in the slag (7)  
uniformly and slowly, and the evolution of gas occurs uniformly  
and over a relatively long period of time.

6. Method in accordance with any of Claims 1 to 5,  
characterized by the fact that the density of the preforms (8)  
is adjusted in such a way that they disintegrate with a time  
delay.

7. Method in accordance with any of Claims 1 to 6,  
characterized by the fact that a flux, preferably limestone, is  
additionally added to the mixture.

8. Method in accordance with any of Claims 1 to 7,  
characterized by the fact that a slag thinner, preferably CaF<sub>2</sub>,  
is additionally added to the mixture.

9. Method in accordance with any of Claims 1 to 8,  
characterized by the fact that a reducing agent, preferably  
silicon and/or aluminum, is additionally added to the mixture.

10. Method in accordance with any of Claims 1 to 9,  
characterized by the fact that the preforms (8) are introduced  
through the sidewalls (10) and/or the furnace roof (4) of the  
electric arc furnace (1).

11. Method in accordance with any of Claims 1 to 10,  
characterized by the fact that the preforms (8) are introduced  
into the slag (7) in a directed way in the vicinity of or  
directly at the hot spots of the electrodes (5a-c).